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THE AGRICULTURAL SITUATION

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A Brief Summary of Economic Conditions

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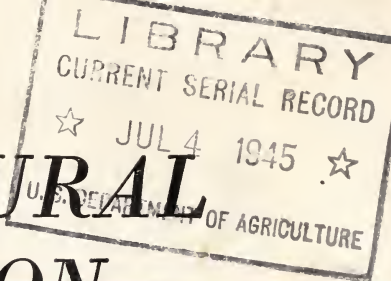
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FIRST PRIORITY for food production, with emphasis on greater output of scarce foods, by providing farmers with adequate manpower and machinery is the top recommendation of the Special House Committee investigating food shortages which is headed by Clinton P. Anderson, the newly appointed Secretary of Agriculture.

* * * To increase the beef supply, cattle feeders are now being paid a direct subsidy of 50 cents a hundred pounds on cattle grain-fed for slaughter, grading good or better and weighing more than 800 pounds. Likewise to increase the pork supply, the hog price support program has been broadened to include hogs of all weights instead of the previous 300-pound maximum. Slaughter subsidies on hogs and cattle have been adjusted upward. And Government meat purchases are being made on the basis of getting a more equitable geographic distribution of civilian meat supplies. * * *

With civilian sugar supplies down about a fifth from last year, domestic beet and cane producers are being helped to obtain adequate supplies of labor and machinery to make possible top production this year. * * *

Total cash receipts from farm marketings in 1944 were 19.8 billion dollars, 2 percent above 1943 receipts.



Civilian Food Supplies for 1945

FOOD supplies in prospect for United States civilians this year will be more than adequate in all parts of the country to meet essential needs. Per capita supplies of all foods are expected to be 2 to 4 percent above the average level of consumption in the prewar years, 1935-39, but 5 to 7 percent below the 1944 record consumption.

Civilian demand for all foods will continue to be unusually strong. And the difficulties of distributing the reduced supplies of foods such as beef, pork, lard, butter, other fats and oils, sugar, and canned fish will increase. However, compared with prewar years, larger quantities of other nutritious foods available from commercial and victory garden production will provide more of the essential nutrients, except calories, than will be lost through smaller supplies of sugar, fats and oils, and canned fish. Thus the consumption of some fresh vegetables, fluid milk, eggs, canned fruit juices, citrus fruit, and whole grain and enriched cereal products is expected to be much larger

than in 1935-39, and a little more than in 1944.

Not only will over-all civilian consumption be maintained above prewar levels, but food supplies will also be large enough to meet heavier military requirements than in 1944. This is possible because of tremendous production of food crops and livestock in the last few years. And on the basis of present indications, food production in 1945 may be about 32 percent above the 1935-39 average, although about 5 percent less than the 1944 record. The principal reduction from 1944 will be in slaughter of meat animals, which will affect both the meat and the fats and oil supply. Food demands in 1944 were met partially through heavy reduction of food stocks, which are now at a low level.

In 1944 about 80 percent of the total quantity of food utilized went to American civilians, 13 percent to the United States military, and the remaining 7 percent to foreign countries and United States territories. This apportionment of the 1944 food supply to American civilians brought average consumption per person up to a level 10 percent above that of 1935-39. On the basis of present indications, American civilians may get 77 percent of the total amount of food for 1945, 16 or 17 percent may be taken by the armed forces for troop feeding and civilian relief abroad, and the other 6 or 7 percent will be sent abroad through lend-lease, relief channels, or usual commercial arrangements.

Supplies of individual foods for United States civilians in 1945 may be, briefly, about as follows:

Meat about 120 to 125 pounds per capita, much below the 1944 record rate of 150 pounds. Most of the drop is due to reduced hog slaughter, which also reduces lard supplies. With butter production down too, the whole fats and oils situation is very tight.

1945 Food Production Forecast ¹

Food group	1945 forecast as a percent of—		
	1935-39 average	1943	1944
Food grains.....	140	121	95
Truck crops.....	137	110	101
Fruits.....	122	114	99
Vegetables ²	105	84	99
Sugar crops.....	92	114	112
Total food crops.....	126	109	98
Meat animals.....	141	94	91
Poultry.....	145	95	95
Dairy products.....	117	104	101
Total food livestock.....	134	97	95
Total food production.....	132	100	96
Civilian food consumption per capita.....	102-104	96-98	93-95
Total agricultural production.....	127	99	93

¹ Forecast based on prospective plantings and preliminary livestock indications.

² Excludes truck crops.

with no substantial improvement in sight till next summer.

Civilian egg consumption is establishing new records, and may average about an egg a day for the whole year. But civilian demand will continue to be heavy and because of seasonal decrease in production supplies will be smaller in the second half of the year.

Fresh fruits and vegetables, about the same in total as last year, but more citrus, tomatoes, leafy green and yellow vegetables than prewar. Victory gardens will be particularly important in keeping up our wartime level of these important foods.

Canned fruits and vegetables, and potatoes and sweetpotatoes will be somewhat less than 1944, with actual civilian supplies directly dependent on military takings.

Food grains will be ample to meet increased civilian demand, with the exception of rice, and still fill very large military and export requirements.

Fish supplies in the fresh and frozen state will be in prewar quantities, but there will be little canned fish.

Beverage supplies will be adequate, with perhaps more tea and coffee and a little less cocoa.

The indicated per capita food supplies from both commercial and victory garden production, will provide a level of civilian nutrition generally above the prewar level, but somewhat below 1944. This general improvement is largely due to the 26 percent increase in fluid milk and cream consumption, the enrichment of grain products, and the increased consumption of green and yellow vegetables, tomatoes, and citrus fruits. The reduction in supplies of sugar, meats, fats and oils, compared with 1944, will cut the number of calories 5 to 10 percent, unless people eat more grain products than now seems probable. But American civilians still will average a good safe margin above any recognized standard for the intake of food energy. Supplies of niacin and thiamine will be about 10 percent less than last year, largely because of the cut in pork supplies. Quantities of other nutrients available in 1945 probably will be about equal to those of 1944, but at least 10 percent above the 1935-39 averages.

Food consumption levels in Canada have closely resembled this country's during the war, but food supplies in

Estimated 1944 Civilian Per Capita Supply of Major Foods, Calories Available, and Comparisons with Prewar Consumption, United States, Canada, and Several European Countries

Country	Approximate number calories per person per day		Meats, poultry, fish		Fats and oils, including better		Milk, whole and standard		Sugar and sugar content	
	Number	As per cent of prewar	Dressed weight—pounds	As per cent of prewar	Fat content—pounds	As per cent of prewar	Retail wt. milk equiv.—pounds	As per cent of prewar	Refined basis—pounds	As per cent of prewar
U. S.	3,250	106	194	115	43	96	473	120	98	92
Canada	3,320	108	194	127	42	102	533	117	92	88
U. K.	2,940	98	136	82	39	85	311	125	74	67
Denmark	3,000	94	148	81	37	69	356	92	71	65
Belgium	2,100	71	56	43	19	48	126	70	49	78
France	2,150	77	75	65	11	31	130	68	27	54
Netherlands	2,100	72	51	44	21	44	167	58	42	56
Norway	2,200	73	115	68	24	49	304	78	38	52
Finland	N. A.	N. A.	50	50	15	50	411	67	19	30
Germany	2,500	88	90	69	29	56	160	59	44	92
Austria	2,450	88	73	57	25	81	250	56	45	90
Poland	N. A.	N. A.	33	69	11	65	160	74	19	100

¹ To be comparable with other countries, U. S. figure is about 150 calories less than the total usually used.

Sources: U. S.—BAE; Canada and U. K.—Combined Food Board; preliminary estimates for other countries—OFAR.

Europe have been entirely different. Food supplies were smaller in most of these countries in 1944 than in 1943, and 1945 food production on the Continent is expected to be even less than this past year. There are great differences in food supplies between areas and for farm and nonfarm people. Nonfarm consumption is perhaps 25 percent below farm levels. The very

serious 1945 food situation for many European countries results from disruption of production and distribution as well as general destruction of transportation facilities, food supplies, and processing facilities—the usual aftermath of war.

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Commodity Reviews

LIVESTOCK

CATTLE feeders will receive direct subsidies for fed cattle marketed after May 18, as announced by the War Mobilization Director. Additional programs announced at the same time are designed to increase cattle feeding, to increase margins for processors of meat, to improve meat distribution, and to effect better control of livestock ceiling price regulations.

The Commodity Credit Corporation, through local AAA offices, will pay livestock feeders 50 cents per 100 pounds (liveweight) on AA and A grade cattle sold for slaughter (based on cattle selling for \$14.25 or more per 100 pounds at Chicago) weighing 800 pounds or more which have been owned by the feeder for 30 days or more. There will be no downward revision in the overriding ceilings or the maximums of the stabilization ranges for beef cattle, except bulls, without at least 6 months advance notice.

A new schedule of subsidy payments to cattle slaughterers became effective June 4, representing a 25-cent per 100-pound (liveweight) additional increase for all grades. The special subsidy of 80 cents per 100 pounds for nonprocessing cattle slaughterers was reduced to 40 cents per 100 pounds, liveweight. Slaughter payments on hogs were increased 40 cents, and are now \$1.70 per 100 pounds liveweight. After a more thorough study of slaughter profits,

hog slaughter payments will be adjusted when hog prices decline from ceiling levels.

In an effort to distribute civilian meat supplies more uniformly, new set-asides will be issued so that larger purchases will be made from federally inspected slaughterers whose operations have increased greatly instead of the uniform percentages for all slaughterers of this class.

To encourage increased farrowings this fall—to meet the 37-million pig crop goal—the price support program for hogs has been broadened to include all good and choice barrows and gilts until September 1, 1946. Formerly only butcher hogs of weights up to 300 pounds were included. The \$13 support price, Chicago basis, is unchanged.

1944 CASH RECEIPTS

TOTAL cash receipts from farm marketings in 1944 were 19.8 billion dollars, according to revised estimates, 2 percent above the revised estimate of 19.3 billion dollars in 1943. Government payments in 1944 amounted to 804 million dollars, 20 percent greater than in 1943. This increase was due mostly to the dairy production program which was put into effect in October, 1943.

The 8 percent increase in receipts from crops was brought about mainly because of large acreage, relatively high yields, and slightly higher prices than in 1943.

Cash Receipts From Farm Marketings of Crops and Livestock, 1943 and 1944

Commodity group	1943	1944	1944 as percent of 1943
	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Percent</i>
Food grains.....	947	1,191	126
Feed grains and hay.....	1,126	1,116	99
Cotton and cottonseed.....	1,318	1,490	113
Oil-bearing crops.....	675	477	71
Tobacco crops.....	540	717	133
Fruit and nuts.....	1,203	1,476	123
Vegetables.....	1,592	1,489	94
Sugar crops.....	107	123	115
Forest products.....	101	110	109
Other crops.....	371	414	112
Total crops.....	7,980	8,604	108
Meat animals.....	5,865	5,705	97
Dairy products.....	2,809	2,969	106
Poultry products.....	2,446	2,295	94
Other livestock.....	239	216	90
Total livestock.....	11,359	11,186	98
Total cash receipts.....	19,340	19,790	102
Government pay- ments.....	672	804	120
Cash receipts and Government pay- ments.....	20,012	20,594	103

Cash receipts from meat animals dropped 3 percent as the decline in hog marketings in some of the large producing States of the West North Central region was rather acute. The sale of cattle and calves was slightly greater than in 1943 but production of sheep and lambs dropped.

Cash receipts from dairy products showed a 6 percent gain over 1943 as milk production increased about 812 million pounds, with prices the highest since 1920.

The 1944 cash receipts from all classes of poultry, except turkeys, were below 1943 receipts. Average prices for eggs dropped rather severely resulting in a 6 percent decline in cash receipts despite increased sales. An 11 percent decline in the sale of chickens, other than broilers, combined with a slight drop in price brought about a 13 percent decrease in cash receipts. The quantity of broilers was 6 percent below 1943, with the same percentage decline in cash receipts. In contrast, large turkey marketings

and slightly higher prices resulted in a 23 percent gain in cash receipts over 1943.

POULTRY AND EGGS

BECAUSE of scarce meat supplies and strong civilian demand, the over-all demand for eggs at ceiling prices, despite up grading, has exceeded supply by a wide margin even during the flush production season, an unusual situation. And continuation of this situation is in prospect for most of the remainder of the year. Per capita consumption during the first quarter of 1945 was at a record of about 100-105 eggs, compared with 90 eggs for a year earlier.

Egg production during the first 4 months of 1945 was 7 percent below a year earlier. Average number of layers in the 4 months was about 10 percent below a year earlier, but favorable weather, ample feed supplies and high unit returns brought about an all-time high rate of lay in April.

Poultry meat production is behind last year though increasing seasonally. Shortages of red meat and heavy military demand are largely responsible for recent increases in production. Although broiler production has been well ahead of last year, it has been more than offset by declines in marketings from general flocks.

Because of heavy demand by the military for chicken meat, War Food Order 119, which has virtually prohibited private sales of commercial broilers in several important broiler-producing areas for some time, was recently extended to include 10 counties in North Carolina. Areas now covered by the order produced about 60 percent of the total commercial broiler output last year.

In 1945 civilians are expected to receive about 20 pounds of chicken per capita, compared with the prewar level of about 18 pounds, but 3 pounds below 1944 consumption and 8 pounds below the 1943 record.

With hatchings of turkey poultts far.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid, interest and taxes	Parity ratio ¹
1935-39 average...	107	128	84
1940.....	100	125	80
1941.....	124	132	94
1942.....	159	150	106
1943.....	192	162	119
1944.....	195	170	115
1944			
May.....	194	169	115
June.....	193	170	114
July.....	192	170	113
August.....	193	170	114
September.....	192	170	113
October.....	194	170	114
November.....	196 ^a	171	115
December.....	200	171	117
1945			
January.....	201	172	117
February.....	199	172	116
March.....	198	173	114
April.....	203	173	117
May.....	200	173	116

¹ Ratio of prices received by farmers to prices paid, interest and taxes.

ahead of last year, the 1945 turkey crop is likely to be the largest on record, exceeding the record 1944 output by about 10 percent. Despite large military requirements—last year's set-aside order for the military was reinstated effective April 8—the expected record output means civilians will probably get more turkey than last year. Turkey consumption in 1944 was nearly 3½ pounds per person compared with the 1935-39 average of little over 2½ pounds.

DAIRY PRODUCTS

FOR the first 4 months of 1945, milk production totaled 38.3 billion pounds, 1 billion more than the January-April 1944 output, and was at an adjusted seasonal rate of over 121 billion pounds. Although this high level of production may not continue throughout the year, it appears that milk production in 1945 will exceed any previous year on record.

This high level of production has made possible a near-record output of

whole milk products, especially American Cheddar cheese and evaporated milk, and has resulted in the largest available supplies per capita of fluid milk. Fluid milk and cream consumption for 1945 is expected to reach 430 pounds per person compared with 423 pounds for 1944 and the prewar average of 340 pounds.

Prices received by farmers will probably continue nearly the same as last year. Demand for most dairy products will continue to exceed the supplies because of large noncivilian needs and strong consumer purchasing power.

With the record seasonally large milk flow, War Food Administration has relaxed some of the limitations on the utilization of milk so as to fully utilize the production. These relaxations permit increased sales of fluid milk and cream, the use of 10 percent more butterfat in ice cream, and a maximum production of 110 percent of the quotas for cheese manufacture during the second quarter of 1945.

In contrast, large noncivilian requirements have necessitated a set-aside of 70 percent of the June Cheddar cheese production for Government purchase, and 55 and 50 percent of the June and July creamery butter output.

FARM LABOR

WITH only 10,017,000 persons employed on farms May 1, a new low for that date, the labor supply available for farm work continues to decline.

Farm operators will continue to rely heavily on family labor as they have in the past 3 years. May first saw a 74,000 increase over a year earlier in the number of family workers, and 125,000 decrease in the number of hired workers. This increase in family workers may mean that members of farm families who left to work in war plants are returning to their farms. Although it is too early to say with

any certainty, there is a possibility that some laid-off war workers will be available for farm work, at least temporarily, if reconversion gets under way on any scale in the next few weeks.

Continued demand on the small supply of farm labor will probably push farm wage rates above the record high of April 1, 1945. Wage rates for regular workers are usually set at the beginning of the season and are not likely to show much change. Thus farm-labor income this year may be an all-time high. Seasonal workers' rates, will, of course, depend on local conditions at the time of hiring.

MARKETING AND TRANSPORTATION

THE early summer is likely to witness more serious difficulties in transportation and marketing of farm products than were faced by the Nation's farmers last year. This year's production goals call for ap-

proximately the same, and in some products, larger tonnages than in 1944, but the marketing of this increased output must be accomplished with less manpower and in many cases with a reduction in facilities and equipment.

Trucks and tires have advanced in age and deteriorated further, while civilian allocations of new tires have continued far below actual needs. A tight refrigerator car situation in regions with record-breaking crops of perishables is in immediate prospect. Getting adequate supplies of ice into such regions and obtaining manpower for re-icing are typical minor transportation problems.

In the Southwest, developments point to an early strain on refrigerator cars in handling a record tomato crop in Texas where 10,000 cars will be needed, and increased requirements for California potatoes where 35,000 cars will be needed. Prospects of an abnormally heavy peach crop in Georgia have intensified preparations for refrigerator car needs in that area.

Prices of Farm Products

Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State.

	5-year average		May 15, 1944	April 15, 1945	May 15, 1945	Parity price May 15, 1945
	August 1909- July 1919	January 1935- December 1939				
Wheat (bu.).....dollars	0.884	0.837	1.47	1.49	1.49	1.53
Rice (bu.).....do	.813	.742	¹ 1.77	1.77	1.77	1.41
Corn (bu.).....do	.642	.691	1.15	1.07	1.08	1.11
Oats (bu.).....do	.399	.340	.799	.710	.689	.690
Hay (ton).....do	11.87	8.87	16.10	16.90	16.50	20.50
Cotton (lb.).....cents	12.4	10.34	19.80	20.20	20.51	21.45
Soybeans (bu.).....dollars	² .96	.954	1.94	2.13	2.15	³ 1.66
Peanuts (lb.).....cents	4.8	3.55	7.74	8.24	8.30	8.30
Potatoes (bu.).....dollars	.697	.717	¹ 1.32	1.74	1.77	1.25
Apples (bu.).....do	.96	.90	3.19	2.53	2.55	1.65
Oranges on tree, per box.....do	⁴ 1.81	1.11	² 2.43	2.54	2.84	² 2.03
Hogs (cwt.).....do	7.27	8.38	12.70	14.10	14.10	12.60
Beef Cattle (cwt.).....do	5.42	6.56	¹ 12.00	12.70	12.90	9.33
Veal Calves (cwt.).....do	6.75	7.80	¹ 13.20	14.00	13.90	11.70
Lambs (cwt.).....do	5.88	7.79	13.40	13.90	13.50	10.20
Butterfat (lb.) ⁵cents	23.3	29.1	¹ 50.8	50.5	50.2	⁶ 43.1
Milk, wholesale (cwt. lb.) ⁵dollars	1.60	1.81	¹ 3.11	¹ 3.12	3.08	⁶ 2.49
Chickens (lb.).....cents	11.4	14.9	24.4	25.7	26.6	19.7
Eggs (doz).....do	21.5	21.7	27.2	33.0	33.7	⁶ 31.6
Wool (lb.).....do	18.3	23.8	¹ 42.8	40.4	41.0	31.7

¹ Revised.

² Comparable base price, August 1900-July 1914.

³ Comparable price computed under sec. 3 (b) Price Control Act.

⁴ Comparable base price, August 1919-July 1929.

⁵ Does not include dairy production payments made directly to farmers by county AAA offices.

⁶ Adjusted for seasonality.

Adequacy of grain elevator space for the big wheat crop is tied in with the problem of car supply. If there are not enough boxcars currently to move the grain out of elevators, space will not be available to adequately handle the new crop. While every effort is being made to supply cars, the outlook is not encouraging.

Rather than improving the textile bag situation, Victory in Europe has intensified the problem. Increased relief feeding means more bags for food shipments. And once on their way these bags are gone, as far as American farmers are concerned. This and other causes add up to a 20 percent boost in agricultural demand for textile bags. But allocations for the material for making these bags are running more than five percent under last year.

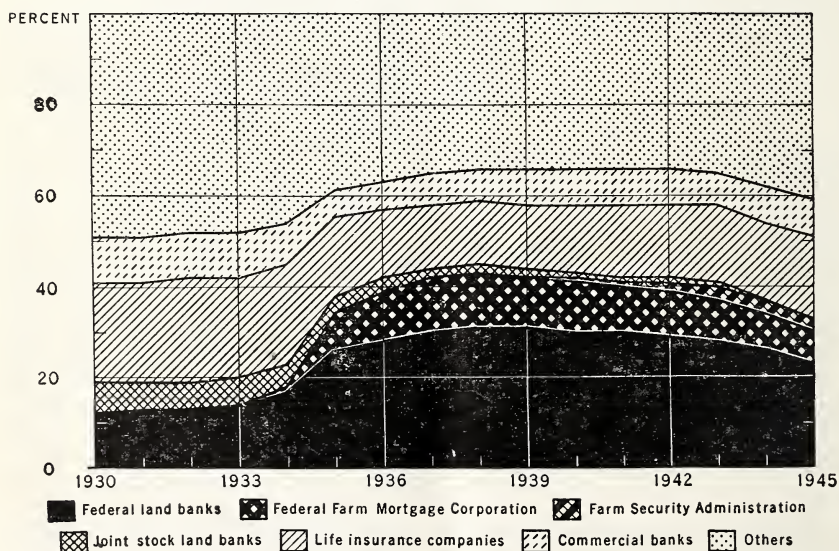
Container requirements are another urgent problem likely to show up first in the Southwest and in peach-producing States such as Georgia, South Carolina, North Carolina, and Arkansas. The situation on lugs and baskets

will be tight, in spite of efforts such as in the Georgia area to stock baskets 60 to 70 days ahead of the usual time. Emphasis will be on used containers, and some extension of the practice of hauling products in bulk is indicated.

Wood supplies for containers are much tighter than a year ago, so that at best, wood containers will not exceed last year's short supply. Shortage of textile materials is at such a stage that re-use will be depended on more than at any time since the start of the war. The fiberboard situation is much worse than a year ago.

Unexpected developments may alter this dark picture of early summer marketing and transportation. Conservation measures organized by the Office of Defense Transportation can be counted on to eliminate much waste mileage from producers to plants of processors and in intra-plant movements. Also there appears to be a growing tendency to recognize potentially troublesome developments in time to make the necessary shifts of limited manpower and equipment.

PERCENTAGE OF FARM-MORTGAGE DEBT HELD BY SELECTED LENDERS, UNITED STATES, JANUARY 1, 1930-45



How the Farm-Mortgage Debt Is Distributed

TOTAL farm-mortgage debt on January 1, 1945 is estimated at 5¼ billion dollars, a decline of one-fifth from the 1940 level. Along with this decline has occurred a major shift in the distribution of the debt among the several lenders. On January 1, 1945, the federally sponsored agencies—Federal land banks, Federal Farm Mortgage Corporation, Farm Security Administration and joint-stock land banks—held about 33 percent of the total debt as compared with over 43 percent, 5 years earlier. Private lenders, on the other hand, held a correspondingly larger proportion of the debt at the beginning of 1945.

Of the decline in total debt of more than 1.3 billion dollars between 1940 and 1945, over 92 percent occurred during the last 3 years. This decline is even more significant when viewed in the light of the increase which occurred during and immediately following World War I. During the 5 years 1915-19, the farm-mortgage debt increased 69 percent as compared with a decrease of 20 percent during the 5 years 1940-44.

Recent Loan Trends

During the 5 years, 1940-44, the loans held by the federally sponsored agencies were reduced by \$1,112,000,000, or 39 percent, as compared with a decline of \$1,316,000,000, or 20 percent, for the total farm-mortgage debt. Loans held by all these agencies fell off during this period except those held by the Farm Security Administration, which increased from \$38,566,000 to \$178,936,000.

Loans held by the Federal land banks alone decreased nearly 40 percent, and loans held by the Federal Farm Mortgage Corporation declined more than 51 percent. Since the enactment of the Emergency Farm Mortgage Act of 1933 the joint-stock land banks which were not already in

receivership have been in liquidation. Progress in liquidation since January 1, 1940 has been rapid and loans held have fallen from \$91,726,000 on that date to only \$5,455,000 on January 1, 1945.

67 Percent with Private Lenders

On January 1, 1945 the remaining lenders held an estimated \$3,529,308,000 or 67 percent, of the total farm-mortgage debt. Life insurance company loans totaled \$933,723,000, insured commercial banks \$449,582,000, and "other" lenders \$2,146,000,000.

In this latter category are individual lenders, mortgage companies, banks other than insured commercial banks, and other miscellaneous lenders. Individual lenders hold the largest proportion of the loans included in the category "other". A special survey conducted for 1940 indicates that individuals held about 70 percent of the debt included as "other." The proportion held by individuals on January 1, 1945 probably was somewhat larger than in 1940, as new loans made by individuals increased at a more rapid rate during the interim than did those made by other private lenders.

The net decline of mortgage loans held by life insurance companies from January 1, 1940 to January 1, 1945 was only a little more than 50 million dollars, or 5 percent. However, in the two years 1940 and 1941 their outstanding loans increased almost 80 million dollars, which was followed by a decline during the next three years of nearly 130 million dollars.

Loans held by insured commercial banks on January 1, 1945 were about 16 percent below those 5 years earlier. These banks, however, have shown a decided strengthening in their mortgage loans portfolio during the last few years. Their farm-mortgage loans increased about a million dollars during 1944. Loans held by "others"

Total Farm-Mortgage Debt and Amounts Held by Selected Lenders, January 1, 1940-45 ¹

[Million dollars]

Lenders	1940	1941	1942	1943	1944	1945
Federal land banks	2, 010	1, 957	1, 881	1, 718	1, 453	1, 210
Federal Farm Mortgage Corporation	713	685	635	544	430	347
Farm Security Administration ²	38	73	122	164	177	179
Joint-stock land banks ³	92	74	56	37	10	5
Life insurance companies	984	1, 016	1, 063	1, 043	987	934
Insured commercial banks	534	543	535	476	448	450
Others	2, 215	2, 186	2, 192	2, 135	2, 130	2, 146
Total	6, 586	6, 534	6, 484	6, 117	5, 635	5, 271

¹ Excludes territories and possessions. Loans held include regular mortgages, purchase-money mortgages, and sales contracts.

² Includes tenant-purchase and farm-enlargement loans, farm-development loans, and construction loans to individuals. Includes also loans made for these purposes from State Rural Rehabilitation Corporation trust funds.

³ Joint-stock land banks have been in liquidation since May 12, 1933. The data also include banks in receivership.

also increased slightly last year though there was a net drop of about 3 percent during the 1940-44 period.

Some Factors Influencing Trends

The trend of mortgage holdings of different lender groups reflects both loan liquidations and new loans. Loans of the land banks and the Mortgage Corporation are made on an amortization basis, with the result that substantial principal payments are required each year. These institutions, as well as certain private lenders, have encouraged borrowers to make additional advance payments on principal. As loans made by individuals and other local lenders usually are for relatively short terms, borrowers have had an opportunity to make substantial principal reductions when loans matured. Farmers most indebted, therefore, have had an opportunity to use their wartime incomes to repay debts.

Lending activities of different lender groups are reflected in farm-mortgage recordings. Loans closed by the Federal land banks and the Federal Farm Mortgage Corporation were 14 percent higher during 1944 than in 1943, but the amount was not greatly different from the amounts closed in 1940 and 1941. The volume of loans recorded by individuals was 10 percent larger in 1944 than in 1943 but 71 percent larger than in 1940.

New loans made by institutional lenders frequently result from the sale of farm real estate held by them. Loans of life insurance companies in particular have been sustained during the period 1940-44, as a result of farm real estate disposals. On January 1, 1940 life insurance companies held real estate with a book value totaling nearly \$600,000,000. During the five following years their investment in farm real estate has been reduced on the average of nearly \$100,000,000 a year so that on January 1, 1945 it totaled only \$119,169,000. At the beginning of 1940 the Federal land banks and the Mortgage Corporation did not own as much farm real estate as did life insurance companies, and their investment on January 1, 1945 was relatively insignificant. Real estate disposals probably will not be nearly so significant in the future trend of mortgage debt as they have been in the past few years.

Postwar Outlook

The downward trend of the farm-mortgage debt during the war has been a wholesome development. The situation on January 1, 1945, was materially better than at the end of World War I and immeasurably better than in 1923 when mortgage debt was at an all-time peak. Many of the loans outstanding at the beginning of World War II, and also many of those

made early in the war period, have been either paid off or substantially reduced. This current mortgage debt situation, however, should not be interpreted to mean that there is no danger of financial distress in the postwar period. A very active real estate market in 1942 through 1944 has resulted in a significant volume of relatively large loans in relation to the probable long-time value of the land and also in relation to the probable income situation in the postwar period. Unless farm income is maintained at a relatively high level after the war, many of these mortgage loans are a potential source of financial difficulties.

A larger-than-normal proportion of the increased farm income of the war period went into debt repayments because alternative uses of income either were restricted or appeared less desirable than debt repayment. The amount of materials for farm improvements and machinery was limited while other available investments yielded lower returns in general than the interest rate which farmers were paying on their mortgages.

Farm income may still be relatively high in the postwar period, but current curbs on such items as building materials and farm machinery will probably not have been renewed. Farmers will be replacing and improving capital assets which have rapidly depreciated during the war. Some farmers will invest only their past savings and

current income in land and capital goods, whereas others will have to go into debt to make such purchases.

Those farmers who will want to buy land or make improvements and buy machinery are not necessarily the same ones who will have sufficient savings or high enough current incomes to finance these capital outlays. Returning war workers and veterans, for example, may be especially in need of land and equipment for farming. Government programs which provide guarantees on limited amounts of credit to veterans may give a stimulus to a large volume of mortgage lending. There is danger that a too liberal credit policy may lead later to an embarrassing financial position for lenders as well as for many farmers.

If farm income remains high for a few years after the war and real estate transfers continue active, those lenders that do not restrict their loans to normal agricultural value may be expected to increase their new loans substantially. Should farm income drop severely in the postwar period, those agencies which base their loan policy on normal values may then increase their loans largely through refinancing of loans held by other lenders. Refinancing operations by Federally sponsored agencies similar to those which occurred during the depression of the early 1920's and the thirties again may become necessary.

The postwar period doubtless will be

Acquired Farm Real Estate Held by Selected Lenders, United States, January 1, 1940-45

[Million dollars]

Lending agencies	1940	1941	1942	1943	1944	1945
Federal land banks ¹	126	109	74	40	17	7
Federal Farm-Mortgage Corporation ¹	40	33	24	20	13	6
Joint-stock land banks ²	47	36	25	18	7	4
Life insurance companies ³	600	548	442	336	205	119
Insured commercial banks ⁴	42	33	23	⁵ 20	(⁶)	(⁶)
Three State credit agencies ⁷	68	61	53	44	36	(⁶)

¹ Investment, includes sheriff certificates and judgments.

² Carrying value, includes sheriff certificates and judgments. Real estate held by banks in receivership included at book value.

³ Estimated book value.

⁴ Book value.

⁵ June 30, 1942.

⁶ Data not available.

⁷ Reported investment by Department of Rural Credit of Minnesota, Bank of North Dakota, and Rural Credit Board of South Dakota.

one of substantial readjustments in agriculture. The extent to which these readjustment problems are successfully met will in no small measure depend both upon the way farmers manage their financial affairs and the type of loan and collection policies followed by lenders. The ability and willingness of lenders to shape their loan and collection policies to meet financial problems of farmers varies consider-

ably. Some private lenders will be in a financial position to take a long-run view of mortgage financing in both their own and their borrowers' best interests. But many of the small private lenders may not have the financial resources necessary to meet depression exigencies even though they might be willing to do so.

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Sugar Supply Prospects

SUGAR supplies available to civilians in the United States will be at least one-fifth smaller during the remainder of 1945 than they were in 1944 or during the first quarter of 1945. Per capita civilian consumption, which averaged 89 pounds in 1944, is expected to be reduced to an annual rate of about 70 pounds for the remainder of 1945, or 72 pounds for the entire year.

The most important factors accounting for the shortage of sugar in the United States in 1945 are (1) the smaller crop produced in Cuba this year, (2) increased needs of the military forces and of liberated areas in Europe, (3) a reduction of one-half million tons in sugar stocks in the United States.

This year's Cuban sugar crop is currently estimated at 4.0 million tons. This compares with a total of 5.6 million tons in 1944, of which the equivalent of 900,000 tons was used for high test molasses for the manufacture of alcohol to use in making rubber and other products. While the United States has purchased the entire 1945 Cuban crop of sugar, except for relatively small quantities needed for local consumption in the island and exports to Latin America, this does not mean that the people of the United States will be able to consume all of the Cuban sugar purchased. Substantial parts, by previous agreement, will be shipped to Canada and the United Kingdom. In prewar

years, these countries normally imported about 640,000 tons of sugar from Cuba as compared with 2 million tons for the United States. While the amount of beet sugar produced in the United States in 1945 is likely to be somewhat larger than that produced in 1944, the increase will not be nearly sufficient to make up the decrease in supplies obtainable from Cuba. Also none of this sugar will be available until late in 1945.

Three-Fourths Normally Imported

In prewar years the United States obtained about one-fourth of its supply of sugar from the production of sugarcane and beets in continental United States. Slightly more than one-fourth was imported from Cuba. The remainder was almost equally divided between Puerto Rico, Hawaii and the Philippines.

No sugar has been obtained from the Philippines since 1941 and no significant quantity is likely to reach this country before 1947. Before the outbreak of war, Japan was obtaining all the sugar it needed from Taiwan and other areas under its control. Consequently the Japanese were not interested in making much use of the extensive cane sugar acreages in the Philippines. Instead, they encouraged rice and cotton production in large areas which normally produced cane, and also damaged many sugar mills.

Production in Puerto Rico and

Hawaii the past two seasons was slightly below the prewar average. On the other hand, production in Cuba has increased and was especially large in 1944 and this year's crop, though one-third below 1944, is still one-third above the 1935-39 average. The production of beet sugar in continental United States is now down one-fifth below the 1935-39 average, but cane sugar output has increased somewhat. However, the total production of the two has declined because usually the beet crop is so much larger than the cane.

Europe Usually Imports Little

Europe normally produces a major part of the sugar which its people consume. However, production has been greatly reduced by active fighting, disrupted transportation, lack of coal for operating sugar mills, and dislocated populations. This is true in liberated countries as well as in Germany itself. Part of the reduced production must be made up by shipments of sugar which would otherwise be available to the United States if the liberated areas are to obtain even the minimum amounts necessary to prevent serious suffering. Japanese occupation of Java makes it impossible for Europe to import sugar from that source, as it formerly did when local supplies were inadequate.

American military needs for sugar in 1945, as allocated shortly before VE-day, amount to 1.3 million tons, about 9 percent more than in 1944. It was thought that this increase was needed because of the larger number of men in the services stationed abroad, and the larger number of civilians in recent battle areas who must be fed by the Army and Navy. Despite reductions in the size of the armed forces connected with the European phase of the war, intensified efforts in the Pacific, necessitating more personnel and much longer supply lines, means that reduced sugar requirements in the East will be offset by increased needs in the West. It is expected that the

Sugar Supply Sources for the United States, 1935-39 average, 1944 and 1945 estimate¹

Source of supply	Amount of sugar (raw value)		
	1935-39	1944	1945 estimate
	<i>1,000 tons</i>	<i>1,000 tons</i>	<i>1,000 tons</i>
Domestic beet.....	1,469	1,156	1,100
Continental cane.....	424	538	480
Cuba.....	2,008	4,024	2,600
Puerto Rico.....	892	788	830
Hawaii.....	946	824	800
Philippines.....	956	0	0
Other.....	101	131	140
Total.....	6,796	7,461	5,950

¹ The figures include relatively small amounts exported from the United States.

military will use about one-fifth of the total supply of sugar available to the United States in 1945.

Stocks Down Half Million Tons

Total stocks of sugar in the United States on January 1, 1945 amounted to 1.2 million tons, raw value, as compared with 1.7 million tons a year earlier and 2.1 million tons on January 1, 1943. The stocks on hand at the beginning of this year were the lowest since comparable records became available and close to the minimum necessary at that time of year if continuous distribution throughout the country is to be maintained.

There is little possibility that the supply of sugar available to the United States during the remainder of 1945 can be significantly increased. Special incentive programs to encourage the production of sugar are already in effect in every sugar-producing area of the United States, including island territories. It has been suggested that more than the usual proportion of beet sugar from the 1945 crop be used in the fall months this year. However, if this is done, there will be a corresponding decrease in supplies for 1946, in addition to the extra expense of transporting beet sugar outside of the areas where it is normally consumed.

Beet sugar production in the United States is likely to be larger in 1946 than this year. Inadequate labor sup-

plies have been the most important factor limiting sugar beet production since 1943. Increased mechanization and a somewhat larger supply of labor seems likely by 1946.

Small World Output for Some Time

It will probably be several years before world sugar production increases to its prewar level. However, some increase in production in 1945-46 is probable. Cuba has now about 2.6 million acres in cane, as compared with an average of 2.2 million acres for 1935-39. The small crop harvested in 1945 is largely the result of a lack of 2-year-old cane to harvest and a drought during the growing season. Yields in 1946 will be higher if normal weather prevails, although very little 2-year-old cane is likely to be available.

Beet sugar production in Western Europe probably will be somewhat larger in 1945 than it was last year and should increase further in 1946, as this area recovers from the effects of war. Assistance from the United States in obtaining needed fertilizer, machinery and other supplies would doubtless add appreciably to the amount of sugar produced. This will indirectly increase the supply of sugar available to the United States.

In prewar years, France produced about 1 million tons of sugar per year. Production in 1944 was only a fraction of this. Many of the sugar beets produced last year could not be processed because of a lack of coal for the sugar factories. A similar situation existed in Belgium. Sugar production in Czechoslovakia, which averaged about 750,000 tons in prewar years, may

easily reach its lowest point in 1945, although reliable information is unavailable. The other European countries producing large amounts of sugar in prewar years were: Russia, 2.6 million tons, Poland, 550,000 tons, and Germany, 2.1 million tons.

The production of sugar in Puerto Rico in 1944 and 1945 has been relatively small because of adverse weather and labor difficulties. Some increase is probable in 1946, but the amount will be small relative to the total needs of the United States.

Production in Hawaii probably cannot be increased very much because of the lack of additional suitable land. Neither is the production of cane sugar in continental United States likely to increase much in the next few years. It has been maintained at a relatively high level during the war and the mills in Louisiana have been operating at close to their maximum capacity.

Relatively little is known at this time of the condition of the sugar industry in the Philippine Islands. In prewar years, the United States obtained nearly a million tons of sugar per year from this source. Assistance from the United States in rehabilitating the industry doubtless would materially increase the amount of sugar which could be obtained from the Islands during the next few years. However, no sugar can be expected from the Philippine Islands in 1945 and probably not in 1946, largely because of the time needed to reestablish cane fields.

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Farm Machinery in Wartime

FARMERS have greatly expanded their use of farm machinery during the war. Because of top demand for agricultural products at favorable prices, together with rising labor costs, widespread use of many machines has been profitable on farms where this would not have been true

under prewar conditions. Several million farm men in the armed forces and in war industries have necessitated greater use of farm machinery to meet wartime farm labor shortages. And because farm wage rates doubled from 1941 to 1944, farmers have been stimulated to use their machinery more

extensively. Further, greatly increased farm incomes have given farmers the means to generally expand their use of farm machinery.

Big War Output

When United States entered the war, farmers in many areas were well supplied with farm machinery. The years 1939 through 1941 saw a large amount of new farm machinery produced, with the 1941 output the largest in history. As the demand for agricultural products increased beginning in late 1941, there has been a corresponding increased demand for farm machinery which has been far from satisfied. And even though production of new farm machinery has been restricted during the war, the 1942 and 1944 output were above normal prewar levels. Only the 1943 production can be considered below prewar. Yet this high level of production during 5 out of the last 6 years has not been enough to meet the demand.

War restrictions on the quantities of steel and other materials available for producing farm machinery made it necessary to utilize the materials in a way to produce the machines that would be most effective in meeting the tremendous demands for increased food output and at the same time make maximum use of dwindling labor supplies. Tractor production, for example, was planned so that there would be available only a minimum of replacements for obsolete and worn out tractors, and so that there would be sufficient additional tractors to take care of increased crop acreages on the one hand and to compensate for losses in animal power due to declining work stock numbers on the other. Tractors, on farms from 1942 through 1944 increased more than 12 percent, with comparable increases for most tractor tillage equipment.

Emphasis on Harvest Machines

To help meet the labor shortages for harvesting operations, probably the most severe of all farm labor shortages, the various wartime farm machinery

Production Outlook for Farm Machinery

Production of farm machinery and equipment in prospect for the year beginning on July 1 will be at least 30 percent more than scheduled for the season just ending. But the bulk of the increased supplies are not expected to become available until after this year's harvest.

Manpower and component parts difficulties will be encountered, but large amounts of steel are expected to become available to manufacturers of farm machinery and the Government is helping the plants obtain adequate manpower.

Production quota limitations on farm machinery manufacturers have been removed, and they will continue to receive assistance in obtaining materials including steel. In addition, they are now permitted to obtain, on a competitive basis, steel in excess of allotments.

Manufacturers expect to complete the 1944-45 program in full, though production on May 1 was about 10 percent behind schedule, with some items 25 percent behind. Tractor output, however, was about on schedule. This program calls for new machinery production a little smaller than the record output of 1941.

Editor

production programs gave high quotas to the important labor-saving harvest machines. For many—such as corn pickers, combines, windrow pick-up balers, and tractor mowers—the percentage increase in numbers on farms has been much greater than for tractors. Some machines either in the experimental stage or little used at the

outbreak of war, such as the beet harvester, mechanical cotton picker, field silage harvester, and land clearing machines, have also increased in use during the past few years, but are still of relatively minor importance.

Outstanding during the war has been the shift from hand to machine milking. Milking machines are used more days per year and more hours per year than any other farm machine. The 50 percent increase in milking machines since January 1, 1942 has contributed materially toward meeting labor shortages on many farms.

Machines Increase Labor Output

Getting more work out of each machine, especially the new-type machines, has been a most important factor in obtaining greater agricultural output during the war. Recent studies show that acres harvested per mechanical corn picker jumped from 100 acres in 1941 to 150 in 1943. And similar increases have taken place in the use of combines, hay balers and many other harvest machines. Farm machines, particularly the labor-saving ones, have had greater annual use during the war because of increased acreages of crops per farm and because of more extensive custom work. Accelerated mechanization has probably been the most important farm labor saver during the war. The depleted farm labor force could not possibly have set the all-time production records without the increased use of machines.

Thus, this greater use of farm machinery during the war has been accompanied by a much greater output per farm worker. The 1944 output per worker was nearly one-half more than the 1935-39 average. And this resulted despite the radical change in the farm working force. Because of the large numbers of skilled farm men drained from the farm labor force into the armed services and war industries, the composition of the working force during the war has been less skilled and has been made up of a much higher proportion than usual of women as well as older workers and

children. Yet total agricultural production in 1944 was well over a third more than the 1935-39 average.

Much of this increased output per worker was made possible through more effective use of farm machinery. Wartime conditions have stimulated improved methods of getting the most done with each farm machine. Training programs have assisted less skilled labor to make better use of the newer types of machines. Moreover, many of the new types have enabled the less-physically capable workers to do many farm jobs that formerly required able bodied men. Increased mechanization has made possible greater flexibility in farm operations, which have paid dividends in more production, and at the same time made possible greater output per worker. For example, steady use of tractors and tractor equipment day and night permitted rapid land preparation and planting operations in late wet springs, which added materially to the record corn crops of 1943 and 1944. Likewise the 50 percent increase in milking machine installations has been one leading factor which has made possible the very large increase in milk production during the war.

Animal to Tractor Power Speeded

Of equal significance to the decline in skilled farm labor during the war has been the continued decrease in workstock in recent years and a corresponding decrease in animal-drawn and animal-powered machines. Hence the growing dependency on tractor-powered or other mechanical-powered machines. Total decrease in horse and mule numbers in recent years has averaged close to a third of a million head a year and colt production has been steadily declining, with the 419,000-head crop in 1944 probably the smallest in more than a century. There has been little if any change in this trend during the war and it is not likely to change in the years ahead. Thus the need for mechanically powered machines to replace

animal-powered ones will become greater, not less, as time goes on.

But this shift from animal to machine power has its compensation. Since 1920, when the shift became pronounced, over 50 million acres of cropland and large acreages of pasture, once used for growing horse and mule feed, have been made available for the production of food, fiber and oil crops. Because there has been virtually no change since 1920 in the total area of land in harvested crops, summer fallow, pasture and range land, this 50 million additional acres available for food production purposes has considerable significance in the ability of the Nation's agricultural plant to meet the tremendous wartime demands.

A Look Ahead

Today farmers have comparatively large cash resources and so purchases of farm machinery seem certain to be at record levels when the machines become available. Total purchases may exceed one billion dollars annually for at least several years. During the next 5 years increases in tractors on farms are expected to average 100,000 or more annually, and more than 2½ million tractors will likely be on farms by January 1, 1950. About 50,000 of these tractors annually will be needed to compensate for losses in numbers of work stock. Annual replacement needs for worn out and obsolete tractors are now estimated at about 100,000 units, but this figure will continue to increase and may approach 200,000 ten years hence. At the present time there are at least 150,000 tractors and many other farm machines, which would have been discarded had new machines been available.

Most urgent in the postwar period will be the need for new transport vehicles, especially automobiles. Replacements for motor vehicles since 1942 have been extremely small, and several years at least will pass before these demands can be adequately met. Purchases of many harvest machines and other machines having relatively high wartime quotas will, in the postwar period, reflect the high wartime production and be relatively of smaller volume than purchases of planting, and tillage machines. With further expansion of farm electrification in prospect, purchases of all kinds of electric appliances and equipment will reach levels much higher than before the war.

Farmers should thoroughly appraise every machinery purchase. New type machines are becoming available and for many of these the period of use has as yet not been sufficient to determine the farm conditions under which they can be used profitably. For every machine there are minimum standards of annual use which must be met if the machine is to be used profitably.

Many with small acreage will often find it more profitable to hire than own machines. Custom rates can be expected to decline as more machines become available, especially if labor supplies become more adequate and prices recede from wartime levels. Farmers during the war years have learned to keep their old machines in use. Adequate care lengthens the life of machines and on many farms this type of saving can often contribute toward purchases of equipment needed for improving farm living conditions.

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Should the Northeast Raise More Grain?

THE Northeast is the leading feed-deficit region of the United States. Over the years farmers in the Northeast have increased their production of livestock and poultry to a much

higher level than can be fed with the home-grown supply of feed grains and other concentrates. Being close to markets, they find they can usually make higher incomes by adjusting

their livestock numbers to the capacity of their farms in respect to forage production, barn space and labor supply. Ordinarily, the level of livestock production is higher than can be supported on the quantities of grains and other concentrates produced on the farm. And so the deficit has been made up by buying feed shipped from other parts of the country.

**Feed Concentrate Consumption for Year
Beginning October 1, 1942, Northeast
Region, by Areas.**

[Million tons]

Area	Concentrates consumed by livestock	Locally grown grains and feeds	Inshipments of feed concentrates ¹
New England.....	2.30	0.14	2.16
New York, New Jersey and Pennsylvania.....	7.98	3.06	4.92
Delaware and Maryland.....	1.58	.66	.92
Total.....	11.86	3.86	8.00

¹ Includes a small quantity of commercial by-products processed from local materials.

In recent years interest in producing more grain in the Northeast has been even greater than usual—probably because of threatened or actual national grain shortages, and because new developments, such as hybrid corn and mechanical corn pickers have made the production of grain more efficient. The advance in technology on farms probably has increased rather than decreased the advantage of the Corn Belt over the Northeast in the production of grain. Even so, the question of more feed grain production in the Northeast is frequently asked and should be considered in planning adjustments in farming for the postwar period.

Not a Simple Problem

In Northeastern dairy farming, the problem of home-grown grain is closely related to others, particularly that of forage improvement, and becomes a part of the larger problem of how to provide feed nutrients for dairy cattle most efficiently. It is also related to the problems of providing bedding for

cattle and nurse crops for seedings on hay crops. The acreage of small grain in the region probably would be much smaller than now except for these two requirements. Moreover, although improved methods of growing forage crops give satisfactory yields of these crops in fairly long rotations, the rotations on many dairy farms still are too long to get good yields of high-quality forage. If rotations were shortened, the need for corn and small grains in the rotation might even be increased. But for this purpose corn could be grown for either silage or grain, while the small grains could be grown for either hay, pasture, or grain.

From a long-time point of view, a forage improvement program in the Northeast offers great possibilities for reducing the concentrates requirements of dairy herds. Better quality and more amply hay, silage, and pasture could mean more cows that would be better fed and more productive, the feeding of less concentrates per pound of milk, and a lower cost of milk production. But forage improvement is a long-time program and, although considerable progress could be made in a few years, it is unlikely that sufficient progress will be made in the next 5 years to materially change the average concentrate requirements of dairy cows in the Northeast. Thus in looking ahead to the next few years it seems pertinent to analyze the problem of home-grown versus purchased grain on the basis of present feeding practices.

Typical Dairy Farm

An appraisal of the alternatives to the present situation in terms of the major changes involved in farm organization, costs and returns can be made by considering what would happen on a typical dairy farm, assuming a goal of producing 80 percent of the total feed-concentrates requirements for the dairy herd. Either a higher or a lower percentage could be used without changing the analysis or the general conclusions.

A fairly well organized 30-cow dairy

**Present and Proposed Organization of a
Typical Northeast Dairy Farm for
80 Percent Home-Grown Con-
centrate Production**

Item	Unit	Present organ- ization	Reor- ganiza- tion
Cows.....	No.....	30	22
Heifers.....	No.....	15	11
Milk sales.....	Cwt.....	1,800	1,320
Concentrates for cows.....	Tons.....	30	22
Concentrates for heifers.....	Tons.....	4	3
Total concentrates for dairy herd.....	Tons.....	34	25
Home-grown grain.....	Tons.....	10	20
Home-grown grain.....	Acres.....	15	30
Purchased concentrates.....	Tons.....	24	5
Hay.....	Tons.....	90	68
Hay.....	Acres.....	60	45
Productive man work units.....	No.....	615	512
Regular workers.....	No.....	2	2

farm is used for the analysis. Because this farm is representative, the method of analysis would be the same for other farms. Of course, the results would vary, depending on the size of the herd, cropping system, crop yields, and various other factors, but the conclusions regarding the advantage or disadvantage of the proposed changes in farm organization would be in the same direction.

The pertinent phases of the organization of the chosen dairy farm as it is today and as it might be after the changes in organization had been made to provide for the production of 80 percent of the concentrates needed for feeding the dairy herd are shown in table 2. The 30 cows and 15 heifers now on the farm are fed 34 tons of concentrates annually of which 10 tons or about 30 percent are bought. The 20 tons of home-grown concentrates are produced on 15 acres. The herd is also fed 90 tons of hay which is produced on 60 acres of the farm. The yearly production of the 30 cows is 180,000 pounds of milk.

At average yields of crops in the Northeast in recent years, a ton of grain can be obtained from approximately 1 acre of corn or 2 acres of oats, or 1½ acres of barley or wheat. On most farms a combination of corn and small grains would be used; hence

about 1½ acres would be used to produce a ton of grain.

For reasons already mentioned, any increases in the total acreage of grain on most Northeast farms can be accomplished only through corresponding decreases in the acreage of forage crops, which in turn would require proportional decreases in the number of livestock kept on the farm.

Thus a reorganization of this farm to achieve the goal of producing 80 percent of the concentrates to be fed the dairy herd on the farm would involve a reduction in the number of cows from 30 to 22 and of heifers from 15 to 11, because 15 acres now in hay would need to be shifted to the production of grain crops. And total production of milk would be reduced proportionately or from 180,000 pounds to 132,000 pounds. The work load would be reduced approximately 17 percent by the reorgani-

**Estimated Changes in Annual Receipts
and Expenses on the Typical North-
east Dairy Farm When Reorganized**

	Quantity	Value at—	
		1935- 39 prices	1944 prices
CHANGES IN CASH RE- CEIPTS:			
Decrease in milk sales.....	480 cwt..	\$1,056	\$2,040
CHANGES IN CASH EX- PENSES			
Increases:			
Seed for grain crops.....	15 acres..	40	60
Tractor fuel and repairs.....	15 acres..	40	55
Fertilizer for grain crops.....	15 acres..	45	55
Harvesting grain crops.....	15 acres..	60	90
Total increase.....		185	260
Decreases:			
Feed concentrates bought.....	19 tons..	720	1,240
Bedding for dairy herd.....	7 tons....	50	75
Miscellaneous dairy ex- penses.....		80	100
Seeding hay crop.....	3 acres..	30	45
Harvesting hay crop.....	15 acres..	30	50
Total decrease.....		910	1,510
Net decrease in cash expenses.....		725	1,250
Decrease in net cash in- come.....		331	790
Decrease in interest on investment @ 5%.....		40	80
Decrease in labor income.....		291	710

zation of the farm, but it still would be a "2-man farm," and no saving would be made in the overhead charges for labor.

Net Income Less

The estimated changes in the annual receipts and expenses that would result from the changes in the organization of the farm are shown in Table 3. They are computed on the basis of prices for the 1935-39 average and for 1944. The major changes are in the receipts from the sale of milk and in expenses for purchased concentrates. But the decreases in milk sales are significantly more than the decreases in the expenses for feed. Changes in other items of expenses are minor and they tend to offset each other. A balance of net changes in receipts against net changes in expenses shows a net decrease in cash income of \$331 at 1935-39 prices and \$790 at 1944 prices.

In applying this example generally to the immediate future, the adjustments to produce more grain would result in smaller net farm incomes on most dairy farms in the Northeast if any reduction in the number of cows or in the acreage of cash crops were involved. Exceptions might be found on farms well adapted to growing grain but poorly adapted to producing hay and pasture, and on farms now very inefficiently organized. Most farmers who operate farms in the latter group, however, would find better opportunities for raising their incomes through increased forage production and cows

numbers than by growing more grain. On the other hand, the loss in income from shifting toward the production of more grain is likely to be larger on two groups of farms in the Northeast—those having relatively favorable milk prices because they are close to market, and those now producing very little grain—than is indicated in table 3 (which shows a general picture for the region).

Thus on most farms in the Northeast, there seems to be no economic justification for planning to reduce the number of cows in order to be able to produce more grain so long as the national supply of grain remains ample and milk-feed price relationships are approximately normal. In fact, as progress is made during the next few years in the adoption and wider use of forage improvement practices, improved methods of harvesting and curing hay, and more labor-saving methods of doing chores, the best adjustments will be in the direction of more cows per farm, more cows per man, and buying a larger proportion of the feed concentrates fed the dairy herd.

In the more distant future, considerably higher yields per acre of both grain and forage crops may be expected, and the feed for a cow can then be produced on fewer acres. Developments of this kind and extent would of course create broader problems and afford greater opportunities of adjustment than those considered here.

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Trends in Peach Production and Utilization

PEACHES have been grown in North America since early colonial times. Although not so hardy as apples and not adapted to the country's semi-tropical areas, peaches will grow under as varied conditions as any other tree fruit. They are produced

in every State in the country, although of practically no importance in several northern States. Commercial production was started early in the 19th century in the mid-Atlantic coast States. It has since kept pace with the commercial development of the

Nation as the growth of cities furnished wider markets and the building of railroads and highways and developments of refrigeration provided the means of transporting the fruit to consuming centers.

Growing of peaches, like most other fruits, has tended to shift to larger commercial orchards and to the more favorable soils and locations. In the past 35 years, the general level of United States peach production has increased from an average of a little more than 40 million bushels to more than 60 million, with California cling stone varieties accounting for approximately 13 million bushels of the increase. In the same period, the number of peach growers has declined from nearly 2 million to a little over a million. Most of the long time production increase was in the irrigated sections of the West, while the sharp decline in number of growers has been in the East.

Steady Increase in Production

Production has moved upward during the past few years in most commercial peach areas, with the total crop averaging about a fifth larger in the 1939-44 period than in the previous 6 years. Growers have generally followed better cultural practices, including increased applications of fertilizer and more nearly adequate spraying, pruning, cultivation and irrigation, which have been profitable with the higher wartime prices. Also, increased plantings of the late 1930's are now coming into bearing in significant numbers in South Carolina, California, and some other areas.

While peach production has increased steadily over the years, the value has fluctuated with the prices received. The large 1944 crop brought farmers a record return of 154 million dollars, and the short 1943 crop brought the next largest return of 101 million dollars. In contrast, the largest crop on record in 1931 brought only 37 million dollars, followed by a small

crop with the lowest value since 1909, only 17 million dollars.

Between 1909 and 1930, season average prices received by farmers ranged mostly between one and two dollars per bushel. Then in 1931 and 1932 the price dropped to a low of 60 cents and generally remained under a dollar until 1942. By 1943 the price reached a high of \$2.60 and last year averaged \$2.29 per bushel.

Half Sold Fresh

Since 1934 peaches sold fresh have averaged about a half of the total crop, while those sold to canners averaged about one-fourth of production, dried about one-tenth, those used in farm households about one-tenth, and other uses and not utilized about 5 percent.

In California where about two-fifths of the Nation's peaches were grown during the past 10 years, fresh sales averaged only about one-sixth of production. On the other hand, about four-fifths of the production outside of California went to the fresh markets. Fresh peaches are available in volume during June, July, August, and September, with small quantities in May and October. The 10 early Southern States—which have averaged about a fourth of the total crop since 1934—furnish the bulk of the peaches which go to eastern fresh markets in June and July. California marketings are usually in volume from mid-July to mid-September. Marketings from the other western States move principally in August and September. From eastern producing areas, August peaches originate in an area extending westward from Virginia and New Jersey to Missouri, and September peaches are mainly supplied by New York, Pennsylvania, Ohio, and Michigan.

Peaches are the most important canned fruit, and have been from the time canning was first of any commercial importance. Most of the commercially canned peaches of the country have been California clingstone varieties. Each year since 1934,

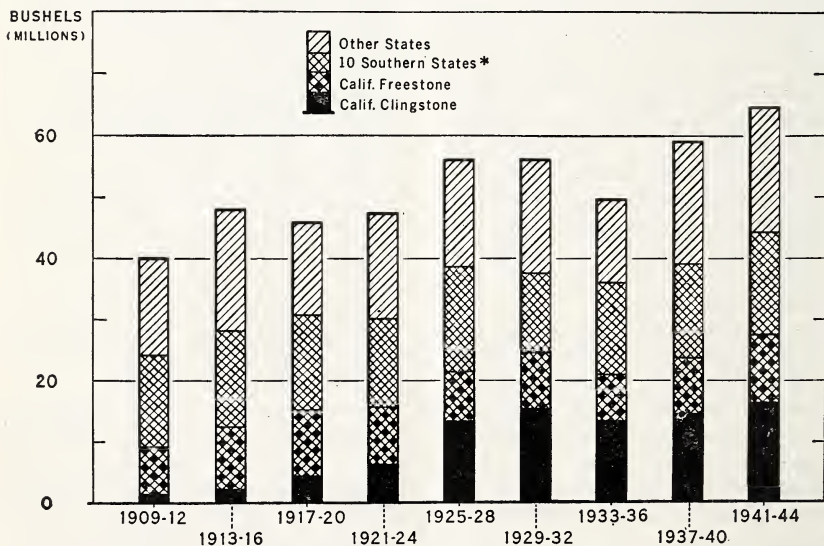
from 88 to 97 percent of all peaches utilized for canning were put up in California. Peaches canned in California increased from less than 2 million bushels used at the beginning of the present century to more than 14 million bushels in 1926. There was a sharp slump in canning during the depression years, reaching a low point in 1932, when less than 6 million bushels were canned in California, and about one-third of the crop in the State was not harvested. After the depression, canning again increased, and in 1944 over 17 million bushels were packed. In recent years canning has become of commercial importance in Washington and Michigan as the level of production has moved upward in these States.

Yellow clingstones have been the most popular peaches for canning and have increased in favor since canning first became important. From clingstones is obtained a canned fruit that is firm, uniformly yellow in color, with a clear syrup. Around 1909, clingstone varieties comprised about three-fifths

of the canned pack, but the proportion of clingstones increased rapidly and since 1925 has made up more than nine-tenths of the total in most years. California clingstones were grown almost exclusively for canning until around 1930. Since that time important quantities have been dried.

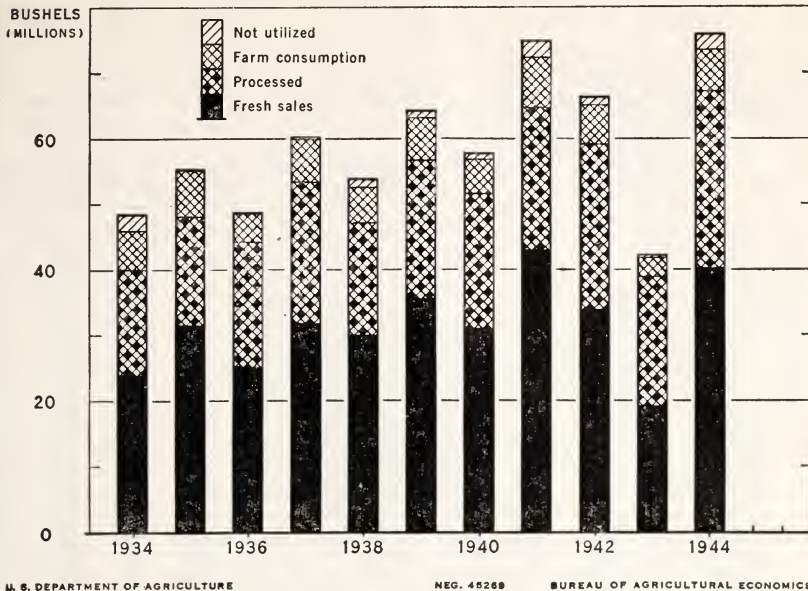
Practically all commercially dried peaches have been produced in California from the time drying was first started in this country. This is because the climate in the California fruit-growing sections is the most favorable in the United States for both fruit production and fruit drying combined, and is one of the most favorable in the world. Most of the rainfall occurs in the winter, while the summers are hot and dry. During the past 40 years, the annual average quantity used for drying has remained at a level of a little more than 6 million bushels. Prior to the "thirties" practically all of the dried peaches were freestones. During the past 10 years, however, clingstones dried have averaged about 1 million bushels,

PEACH PRODUCTION, UNITED STATES, 4-YEAR AVERAGES, 1909-44



* N.C., S.C., GA., FLA., ALA., MISS., ARK., LA., OKLA., AND TEX.

PEACH UTILIZATION, UNITED STATES, BY CROP YEARS, 1934-44



comprising in some years more than one-fourth of total peaches dried.

For many years some fruits have been preserved by freezing, the most important of which has been cold-packed sour cherries. Although peaches are a choice product in the "quick frozen" form, there were practically no peaches frozen prior to 1935 and no important quantities until the last 5 years, following the satisfactory commercial development of the "quick freeze" process. Prior to 1944 the quantity of peaches used for freezing was less than 1 percent of production. In 1944 almost 2 percent of the production was frozen. Within the next few years, the freezing of peaches will no doubt increase considerably and possibly soon may amount to an important part of the peach crop. At present, California is the most important State in the freezing of peaches and will probably continue to be, owing to the importance of the peach production in the State and long distances to markets.

Peaches are one of the most perishable fruits in the fresh form and must be utilized soon after ripening. When large-sized crops have been produced, considerable quantities have necessarily been wasted because canning-plant capacity is not sufficient to handle unusual surpluses, particularly in the East. Freezing may help solve the problem of utilizing surplus peaches, at least the better grades of fruit.

CARY D. PALMER and
E. O. SCHLOTZHauer

Bureau of Agricultural Economics

***Support the 7th
War Loan***

BUY MORE BONDS

Economic Trends Affecting Agriculture

Year and month	Indus- trial pro- duction (1935-39 =100) ¹	Income of in- dustrial workers (1935-39 =100) ²	1910-14=100				Index of prices received by farmers (August 1909-July 1914=100)			
			Wholesale prices of all com- modities ³	Prices paid by farmers		Farm wage rates	Livestock and products			
				Com- modi- ties	Com- modities interest and taxes		Dairy products	Poul- try and eggs	Meat ani- mals	All live- stock
1910-14 average.....	58	50	100	100	100	100	100	101	101	101
1915-19 average.....	72	90	106	151	150	148	148	154	163	158
1920-24 average.....	75	122	160	161	173	178	159	163	123	142
1925-29 average.....	98	129	143	155	168	179	160	155	148	154
1930-34 average.....	74	78	107	122	135	115	105	94	85	93
1935-39 average.....	100	1)	118	125	128	118	119	109	119	117
1941.....	162	169	127	131	132	154	139	121	146	140
1942.....	199	241	144	152	150	201	162	151	188	173
1943.....	239	318	151	167	162	264	193	190	209	200
1944.....	235	325	152	176	170	315	198	174	200	194
1944-May.....	237	327	152	175	169	-----	194	153	201	190
June.....	235	327	152	176	170	-----	192	154	200	189
July.....	231	320	152	176	170	328	194	165	197	190
August.....	232	324	152	176	170	-----	196	171	201	194
September.....	231	320	152	176	170	-----	198	179	200	196
October.....	232	320	152	176	170	325	201	190	201	199
November.....	232	318	152	177	171	-----	203	207	200	202
December.....	232	322	153	178	171	-----	203	211	198	202
1945-January.....	234	322	153	179	172	324	202	199	203	202
February.....	236	321	154	179	172	-----	200	183	209	201
March.....	235	319	154	180	173	-----	198	175	211	200
April.....	231	-----	154	180	173	335	194	176	215	201
May.....	-----	-----	-----	180	173	-----	192	179	217	202

Year and month	Index of prices received by farmers (August 1909-July 1914=100)								Parity ratio ⁵
	Crops							All crops and live-stock	
	Food grains	Feed grains and hay	Tobacco	Cotton	Oil bearing crops	Fruit	Truck crops		
1910-14 average.....	100	101	102	96	98	99	-----	99	100
1915-19 average.....	193	164	187	168	187	125	-----	168	162
1920-24 average.....	147	126	192	189	149	148	143	160	151
1925-29 average.....	140	119	172	145	129	141	140	143	149
1930-34 average.....	70	76	119	74	72	94	106	86	90
1935-39 average.....	94	95	175	83	106	83	102	97	107
1941.....	97	89	159	107	130	85	129	106	124
1942.....	120	111	252	149	172	114	163	142	159
1943.....	148	147	325	160	190	179	245	183	192
1944.....	165	166	354	164	209	215	212	194	195
1944-May.....	170	173	350	160	208	232	225	198	194
June.....	165	170	350	163	210	228	231	197	193
July.....	161	168	350	164	209	230	195	194	192
August.....	156	166	355	162	209	214	186	191	193
September.....	155	162	358	170	207	206	166	188	192
October.....	164	161	357	171	211	205	153	187	194
November.....	165	157	368	168	215	195	188	189	196
December.....	167	160	364	168	215	206	228	196	200
1945-January.....	169	163	365	163	214	205	262	200	201
February.....	169	164	360	161	215	211	223	197	199
March.....	171	166	359	163	215	211	203	196	198
April.....	172	162	362	163	215	221	259	204	203
May.....	172	161	363	165	216	227	193	198	200

¹ Federal Reserve Board, adjusted for seasonal variation, revised November 1943.

² Total income, adjusted for seasonal variation, revised February 1945.

³ Bureau of Labor Statistics.

⁴ Revised.

⁵ Ratio of prices received by farmers to prices paid, interest, and taxes. * 1924 only.

NOTE.—The index numbers of industrial production and of industrial workers' income, shown above, are not comparable in several respects. The production index includes only mining and manufacturing; the income index also includes transportation. The production index is intended to measure volume, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income since output can be increased or decreased to some extent without much change in the number of workers.